

	Type	L #	Hits	Search Text	DBs	Time Stamp
1	BRS	L1	1768	((monitor\$4 control\$4) same (reflectors (each adj1 reflector\$1) (individual adj1 reflector\$1) mirror\$1 microreflectors micromirrors)) and (calibrat\$4 same (reflectors (each adj1 reflector\$1) (individual adj1 reflector\$1) mirror\$1 microreflectors micromirrors)) and ((align\$5 adjust\$4 modif\$4 chang\$4 tun\$4 correct\$4) near9 (reflect\$5 mirror\$4 microreflect\$4 micromirror\$1))	USPAT; US-PGPU B	2004/08/20 12:24
2	BRS	L2	1768	((monitor\$4 control\$4) same (reflectors (each adj1 reflector\$1) (individual adj1 reflector\$1) mirror\$1 microreflectors micromirrors)) and (calibrat\$4 same (reflectors (each adj1 reflector\$1) (individual adj1 reflector\$1) mirror\$1 microreflectors micromirrors)) and ((align\$5 adjust\$4 modif\$4 chang\$4 tun\$4 correct\$4) near9 (reflect\$5 (each adj1 reflector\$1) (individual adj1 reflector\$1) mirror\$4 microreflect\$4 micromirror\$1))	USPAT; US-PGPU B	2004/08/20 12:25
3	BRS	L3	506	((align\$5 adjust\$4 modif\$4 chang\$4 tun\$4 correct\$4 control\$5) near9 (each individual\$3) adj1 (reflect\$5 (each adj1 reflector\$1) (individual adj1 reflector\$1) mirror\$4 microreflect\$4 micromirror\$1))	USPAT; US-PGPU B	2004/08/20 12:27
4	BRS	L4	530	((align\$5 adjust\$4 modif\$4 chang\$4 tun\$4 correct\$4 control\$5 calib\$7) near9 (each individual\$3) adj1 (reflect\$5 (each adj1 reflector\$1) (individual adj1 reflector\$1) mirror\$4 microreflect\$4 micromirror\$1))	USPAT; US-PGPU B	2004/08/20 13:46
5	BRS	L5	25	2 and 4	USPAT; US-PGPU B	2004/08/20 12:43
6	BRS	L6	1	("6411751").pn.	USPAT; US-PGPU B	2004/08/20 12:44
7	BRS	L7	1	6 and (input\$3 output\$3 fiber\$1 waveguide\$1 port\$1 channel\$2 detect\$4)	USPAT; US-PGPU B	2004/08/20 12:46
8	BRS	L8	1	6 and 4	USPAT; US-PGPU B	2004/08/20 13:59
9	BRS	L9	1	6 and (sourc\$2 laser\$1)	USPAT; US-PGPU B	2004/08/20 15:36
10	BRS	L10	1	6 and (measur\$6 same (position\$4 optim\$5 fine tun\$5 adjust\$6 mirror\$1))	USPAT; US-PGPU B	2004/08/20 15:40

	Comments	Error Definition	Errors
1			0
2			0
3			0
4			0
5			0
6			0
7			0
8			0
9			0
10			0

	Type	L #	Hits	Search Text	DBs	Time Stamp
11	BRS	L11	1	6 and (measur\$6 same (position\$4 optim\$5 fine tun\$5 adjust\$6 mirror\$1 power intens\$6 maxim\$7))	USPAT; US-PGPU B	2004/08/20 16:09
12	BRS	L12	1	6 and ((7detector \$7detectors detect\$5 photodetect\$5 photo\$7) same (mirror\$1 '251' '252'))	USPAT; US-PGPU B	2004/08/20 19:39
13	BRS	L13	1	6 and ((7detector \$7detectors detect\$5 photodetect\$5 photo\$7) same3 (mirror\$1 '251' '252'))	USPAT; US-PGPU B	2004/08/20 16:45
14	BRS	L14	1	6 and (mirror\$1 same (switch\$4 '151'))	USPAT; US-PGPU B	2004/08/20 16:52
15	BRS	L15	1	6 and (control\$3 same (light source\$1 signal\$1))	USPAT; US-PGPU B	2004/08/20 16:58
16	BRS	L16	1	6 and (control\$3 same (light source\$1 signal\$1 mirror\$1 reflect\$5))	USPAT; US-PGPU B	2004/08/20 16:59
17	BRS	L17	1	6 and ('155' same '156' same mirror\$1)	USPAT; US-PGPU B	2004/08/20 19:43
18	BRS	L19	1	6 and ('155' '156' '210' '250') same (mirror\$1)	USPAT; US-PGPU B	2004/08/20 19:45
19	BRS	L20	1	6 and ('155' '156' '210' '250')	USPAT; US-PGPU B	2004/08/20 19:46
20	BRS	L21	1	6 and (('155' '156' '210' '250') same (switch\$4 '151'))	USPAT; US-PGPU B	2004/08/20 20:02
21	BRS	L22	1	6 and (bidirect\$5 direction\$4)	USPAT; US-PGPU B	2004/08/20 20:03

	Comments	Error Definition	Errors
11			0
12			0
13			0
14			0
15			0
16			0
17			0
18			0
19			0
20			0
21			0

	Type	Hits	Search Text	DBs	Time Stamp	Er ro r Co mm en ti on
1	BRS	369	sublimat\$3 near9 (glass fiber)	USPAT; US-PGPUB	2003/06/18 19:44	
2	BRS	433	(laser\$1 same beam\$1 same (cleav\$4 cut\$4) near7 fiber\$1)	USPAT; US-PGPUB	2003/06/18 19:55	
3	BRS	146	(laser\$1 same beam\$1 near7 (cleav\$4 cut\$4) near7 fiber\$1)	USPAT	2003/06/18 19:57	
4	BRS	126	(laser\$1 near7 beam\$1 near7 (cleav\$4 cut\$4) near7 fiber\$1)	USPAT	2003/06/18 19:57	
5	BRS	1	((laser\$1 near7 beam\$1 near7 (cleav\$4 cut\$4) near7 fiber\$1)) and sublimat\$5	USPAT	2003/06/18 20:03	
6	BRS	1	((laser\$1 near7 beam\$1 near7 (cleav\$4 cut\$4) near7 fiber\$1)) and sublimat\$5) and (fiber near7 (hold\$4 position\$4))	USPAT; US-PGPUB	2003/06/18 20:04	
7	BRS	52	((laser\$1 near7 beam\$1 near7 (cleav\$4 cut\$4) near7 fiber\$1)) and (fiber near7 (hold\$4 position\$4))	USPAT; US-PGPUB	2003/06/18 20:04	
8	BRS	53	((laser\$1 near7 beam\$1 near7 (cleav\$4 cut\$4) near7 fiber\$1)) and (fiber near7 (hold\$4 position\$4 groove))	USPAT; US-PGPUB	2003/06/19 12:34	
9	BRS	12	((laser\$1 near7 beam\$1 near7 (cleav\$4 cut\$4) near7 fiber\$1)) and (fiber near7 (hold\$4 position\$4 groove))) and ((beam\$1 laser\$1) near7 (cleav\$4 cut\$4) near7 (ribbon (bundle near1 fiber) fibers))	USPAT; US-PGPUB	2003/06/19 12:21	
10	BRS	12	((laser\$1 near7 beam\$1 near7 (cleav\$4 cut\$4) near7 fiber\$1)) and (fiber near7 (hold\$4 position\$4 groove))) and ((beam\$1 laser\$1) near7 (cleav\$4 cut\$4) near7 (ribbon (bundle near1 fiber) fibers))	USPAT; US-PGPUB	2003/06/19 12:27	
11	BRS	2	((laser\$1 near7 beam\$1 near7 (cleav\$4 cut\$4) near7 fiber\$1)) and (fiber near7 (hold\$4 position\$4 groove))) and ((beam\$1 laser\$1) near7 (cleav\$4 cut\$4) near7 (ribbon (bundle near1 fiber) fibers))) and cleav\$3	USPAT; US-PGPUB	2003/06/19 12:27	
12	BRS	5	((laser\$1 near7 beam\$1 near7 (cleav\$4) near7 fiber\$1)) and (fiber near7 (hold\$4 position\$4 groove))	USPAT; EPO; JPO; DERWENT	2003/06/19 12:41	

Er ro rs	
1	0
2	0
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0

	Type	Hits	Search Text	DBs	Time Stamp	Err or Cor mm en ts ni ti on
13	BRS	6	((laser\$1 near5 beam\$1) near7 (cleav\$4) near7 fiber)) and (fiber\$1 same (hold\$4 position\$4 groove))	USPAT; EPO; JPO; DERWENT	2003/06/19 12:46	.
14	BRS	4	((laser\$1 near5 beam\$1) near7 (cleav\$4) near7 fiber)) and (fiber\$1 same (hold\$4 position\$4 groove)) not ((laser\$1 near7 beam\$1 near7 (cleav\$4) near7 fiber\$1)) and (fiber near7 (hold\$4 position\$4 groove)))	USPAT; EPO; JPO; DERWENT	2003/06/19 12:44	.
15	BRS	10	((laser\$1 near5 beam\$1) near7 (cleav\$4) near7 fiber))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/06/19 12:49	.
16	BRS	4	((laser\$1 near5 beam\$1) near7 (cleav\$4) near7 fiber)) not (((laser\$1 near5 beam\$1) near7 (cleav\$4) near7 fiber)) and (fiber\$1 same (hold\$4 position\$4 groove))) not (((laser\$1 near7 beam\$1 near7 (cleav\$4) near7 fiber\$1)) and (fiber near7 (hold\$4 position\$4 groove))) (((laser\$1 near5 beam\$1) near7 (cleav\$4) near7 fiber)) and (fiber\$1 same (hold\$4 position\$4 groove))) (((laser\$1 near7 beam\$1 near7 (cleav\$4) near7 fiber\$1)) and (fiber near7 (hold\$4 position\$4 groove))))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/06/19 12:48	.
17	BRS	0	((laser\$1 near5 beam\$1) near7 (cuting) near7 fiber)) and cleav\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/06/19 12:51	.
18	BRS	0	((laser\$1 near5 beam\$1) near7 (cuting) near7 fiber))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/06/19 12:51	.
19	BRS	75	((laser\$1 near5 beam\$1) near7 (cutting) near7 fiber))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/06/19 12:54	.
20	BRS	2	((laser\$1 near5 beam\$1) near7 (cutting) near7 fiber)) and cleav\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/06/19 12:52	.
21	BRS	94	laser\$1 same (beam\$1 near7 (cutting cleaving) near7 fiber\$1)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/06/19 12:58	.
22	BRS	86	laser\$1 same (beam\$1 near7 (cutting cleaving) near7 fiber\$1)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/06/19 13:01	.
23	BRS	1	(laser\$1 same (beam\$1 near7 (cutting cleaving) near7 fiber\$1)) and cleav\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/06/19 13:02	.

Er ro rs	
13	0
14	0
15	0
16	0
17	0
18	0
19	0
20	0
21	0
22	0
23	0

	Type	Hits	Search Text	DBs	Time Stamp	Error Components
24	BRS	64	laser\$1 same (beam\$1 near9 (cutting cleaving) near2 fiber\$1)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/02/23 13:18	
25	BRS	3	(laser\$1 same (beam\$1 near9 (cutting cleaving) near2 fiber\$1)) and cleav\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/06/19 13:05	
26	BRS	6	("4158555" "5226101" "5983676").pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/06/19 15:29	
27	BRS	3	((("4158555" "5226101" "5983676").pn.) and (laser same (cut\$3 chop\$4) near5 fiber\$1)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/06/19 13:12	
28	BRS	278	(laser near5 (cut\$3 chop\$4 cleav\$3) near5 fiber\$1)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/06/19 13:13	
29	BRS	254	(laser near5 (cutting chopping cleav\$3) near5 fiber\$1)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/06/19 13:13	
30	BRS	224	(laser near5 (cutting chopping cleav\$3) near5 fiber\$1)	USPAT; EPO; JPO; DERWENT	2003/06/19 13:14	
31	BRS	128	(laser near5 (cutting chopping cleav\$3) near2 fiber\$1)	USPAT; EPO; JPO; DERWENT	2003/06/19 19:52	
32	BRS	20	"0097618"	EPO; DERWENT	2003/06/19 13:47	
33	BRS	0	"0097618"	EPO	2003/06/19 13:47	
34	BRS	0	"0097618" and laser\$1	EPO; DERWENT	2003/06/19 13:48	
35	BRS	1	seiler and zurcher	EPO; DERWENT	2003/06/19 13:49	
36	BRS	0	6087624.pn. and (fiber\$1 near7 (hold\$4 groov\$3 fix\$4 position\$3))	USPAT; US-PGPUB	2003/06/19 18:53	
37	BRS	0	6087624.pn. and (hold\$4 groov\$3 fix\$4 position\$3)	USPAT; US-PGPUB	2003/06/19 16:11	
38	BRS	1	6087624.pn.	USPAT; US-PGPUB	2003/06/19 16:23	
39	BRS	1213	6087624.pn. ((power laser beam\$3 volt\$1 amp\$3) near7 cut\$4 near7 (glass fiber\$1))	USPAT; US-PGPUB	2003/06/19 16:44	
40	BRS	1	6087624.pn. and ((power laser beam\$3 volt\$1 amp\$3) near7 cut\$4 near7 (glass fiber\$1))	USPAT; US-PGPUB	2003/06/19 17:00	
41	BRS	0	6087624.pn. and (mov\$4 same fiber\$1 same cut\$4) and (melt\$3 temperat\$4 degree\$1 heat\$4 therm\$5 sublim\$4)	USPAT; US-PGPUB	2003/06/19 17:40	
42	BRS	1	6087624.pn. and (mov\$4 same fiber\$1 same2 cut\$4) and (melt\$3 temperat\$4 degree\$1 heat\$4 therm\$5 sublim\$4)	USPAT; US-PGPUB	2003/06/19 17:19	
43	BRS	1	6087624.pn. and (laser\$1 beam\$1 path\$1 direction\$1 mov\$3 propel\$4 contol\$4)	USPAT; US-PGPUB	2003/06/19 17:20	

Er ro rs	
24	0
25	0
26	0
27	0
28	0
29	0
30	0
31	0
32	0
33	0
34	0
35	0
36	0
37	0
38	0
39	0
40	0
41	0
42	0
43	0

	Type	Hits	Search Text	DBs	Time Stamp	Er ro r Cor ro mm en fi ts ni ti on
44	BRS	1	6087624.pn. and (power energ\$3 burn\$4 melt\$3 temperat\$4 degree\$1 heat\$4 therm\$5 sublim\$4)	USPAT; US-PGPUB	2003/06/19 17:41	.
45	BRS	1	6087624.pn. and (fibers near7 cut\$4)	USPAT; US-PGPUB	2003/06/19 18:58	.
46	BRS	0	6087624.pn. and (laser near7 carbon\$6)	USPAT; US-PGPUB	2003/06/20 16:39	.
47	BRS	1	"5430590"	JPO; DERWENT	2003/06/20 16:41	.
48	BRS	6	"30590"	JPO; DERWENT	2003/06/20 16:42	.
49	BRS	74	laser\$1 same (beam\$1 near9 (cutting cleaving) near2 fiber\$1)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/08/19 13:55	.
50	BRS	184	laser\$1 same (beam\$1 near9 (cut\$4 cleav\$5 sublimit\$4) near2 fiber\$1)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/02/23 13:20	.
51	BRS	1	'54030590'	JPO; DERWENT	2004/08/19 11:56	.
52	BRS	2	09/880698	USPAT; US-PGPUB	2004/08/18 15:30	.
53	BRS	1	6724959.pn.	JPO; DERWENT	2004/08/19 11:56	.
54	BRS	1	6724959.pn.	USPAT; US-PGPUB	2004/08/19 11:57	.
55	BRS	24	((Round\$2 near1 tip\$1) near3 fiber\$1)	USPAT; US-PGPUB	2004/08/19 11:58	.
56	BRS	1	"20030205562"	USPAT; US-PGPUB	2004/08/19 13:17	.
57	BRS	1	"20030205562" and (round\$3)	USPAT; US-PGPUB	2004/08/19 13:18	.
58	BRS	77	laser\$1 same (beam\$1 near9 (cutting cleaving) near2 fiber\$1)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/08/19 13:55	.

Er ro rs	
44	0
45	0
46	0
47	0
48	0
49	0
50	0
51	0
52	0
53	0
54	0
55	0
56	0
57	0
58	0

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- BLACK BORDERS**
- IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- FADED TEXT OR DRAWING**
- BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- SKEWED/SLANTED IMAGES**
- COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- GRAY SCALE DOCUMENTS**
- LINES OR MARKS ON ORIGINAL DOCUMENT**
- REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- OTHER:** _____ *Black spots* _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.